Index of Claims

O9/912,427

Examiner

Arrienne M. Lezak

Applicant(s)

NEEDHAM ET AL.

Art Unit

2143

√ Rejected
= Allowed

(Through numeral)
Cancelled
+ Restricted

Non-Elected
I Interference

A Appeal
O Objected

| Cla                                              | Claim Date |             |               |          |        |        |          |          | Claim Date |       |                                                  |          |                                                  |          |    | (                   | CI       | aim | Date            |   |          |            |          |          |    |          |                                                  |          |          |          |
|--------------------------------------------------|------------|-------------|---------------|----------|--------|--------|----------|----------|------------|-------|--------------------------------------------------|----------|--------------------------------------------------|----------|----|---------------------|----------|-----|-----------------|---|----------|------------|----------|----------|----|----------|--------------------------------------------------|----------|----------|----------|
|                                                  |            |             |               |          |        |        | ٦        | <u> </u> |            | П     | Т                                                | Т        | T                                                | _        | 7  | $\Box$              |          |     |                 | T | Т        | $\top$     | Ī        | Í        | П  | 7        | -                                                |          |          |          |
| ਕ                                                | Original   | 10          | .05           |          |        | - [    | ı        | - 1      | -          | Hiii  | ੀ <b>ਨ</b>                                       | Original | 1 1                                              |          |    |                     | - 1      |     |                 |   | ਜ਼       | Original   |          | - 1      |    |          |                                                  |          | ı        | - 1      |
| Final                                            | ġ          | 4           | <i>::</i>     |          |        |        |          |          |            |       | Final                                            | <u> </u> | 1                                                | - 1      | 1  | 1                   | ı        | 1 1 |                 |   | Final    | ġ          |          | -        |    |          |                                                  | 1        |          | - 1      |
| -                                                | Õ          | 11.4.       | i             | - 1      |        |        |          |          |            |       | -                                                | Ō        | 1                                                | - 1      | 1  |                     | ł        | 1 1 |                 |   | -        | Ō          |          | - 1      | 1  |          |                                                  | ŀ        |          | - 1      |
|                                                  | 1          | / >         | 7             | +        | ┿      | ╅      | +        | ┰        |            | -     | }                                                | 51       | ╌                                                |          | ╫  | ┥                   |          | +   | -               |   |          | 404        |          |          | +  | ╁        | -                                                |          | -+       |          |
| <del>                                     </del> | 2          | Ž           |               | -+       | ┿      | +      | +        | +        | -          | -     |                                                  |          | <del>                                     </del> | -        | ╂— | ╌                   |          | ╁   | Н               |   |          | 101        | -+       | +        | ╁  | ╁        | $\vdash$                                         | $\dashv$ | +        |          |
| <b> </b> -                                       | 3          | 7           | $\rightarrow$ | +        | +      | +      | +        | -+       | +          | -1::: | <u> </u>                                         | 52<br>53 | ↤                                                | -        | ┪- |                     | -        | 1-  | Н               |   |          | 102        | -        | +        | ╀  | ╄        |                                                  | $\dashv$ | +        | 4        |
| -                                                | 4          | 7           | 7             | -+       | +      | +      | +        | -+       | +          | -1::: | <b> </b> -                                       | 54       | ⊢                                                |          | +- |                     |          | ╁┤  | Н               |   |          | 103        |          | +        | +  | +        | $\vdash$                                         | $\dashv$ | -        |          |
|                                                  | 5          |             | -             | ∸        | +      | +      | +        | +        | +          | - ::: | <b> </b>                                         |          | ╌                                                |          | +- |                     | +        | +   | $\vdash$        |   |          | 104        | -        | +        | +  | ╀        | $\vdash$                                         | $\vdash$ | -        |          |
| <del></del>                                      | 6          | 7           | 4             | ┉┼       | +      | ╬      | +        | +        | +          | -     |                                                  | 55       | ╌┤                                               |          | -  |                     |          | ╁┤  | $\vdash$        |   |          | 105        | $\dashv$ |          |    | ┼        | -                                                | -        | -        | 4        |
|                                                  | 7          | 7           | 4             | $\dashv$ | +      | ┿      | +        | +        | +          | -     | <del> </del>                                     | 56<br>57 | ↤                                                | -        | +- | +                   | +        | +   | Н               |   |          | 106        |          | +        | ╀  | ╀        | $\vdash$                                         | $\dashv$ | $\dashv$ |          |
| $\vdash$                                         | 8          | ~           | ~             | +        | +      | ┿      | +        | +        | ┿          | -     | <del> </del>                                     | 58       | ┨                                                |          | ╂- | $\vdash$            | +        | +   | Н               |   |          | 107        |          | +        | ┿  | ╀        | $\vdash$                                         |          | $\dashv$ |          |
| $\vdash$                                         | 9          | Ÿ           |               | $\dashv$ | +      | +      | +        | -        | +          | -     | <del> </del>                                     |          | ⊦⊣                                               |          | ╂  | -                   |          | +   | Н               |   |          | 108        | $\dashv$ |          | +  | ┼        | ├                                                |          | $\dashv$ | $\dashv$ |
|                                                  |            | V           | ٢             | -+       | +      | ┿      | +        | -        | -          | -     | }                                                | 59       | ╌                                                |          |    | ┥                   |          | ╁┷┥ | -               |   |          | 109        | -        | +        | ┿  | ╀        | <u> </u>                                         |          | -        |          |
| <b></b>                                          | 10         | V           | ٢             | -        | +      | +      | -        | +        | +          | -     | <b></b>                                          | 60       | <del>                                     </del> |          | ┿  |                     |          | +   | Н               |   |          | 110        |          | -        | +  | ┼        | ┡                                                | $\dashv$ | $\dashv$ | _        |
|                                                  | 11         | 7           | -             | +        | +      | +      | +        |          | - -        | -     | <del> </del>                                     | 61       | $\vdash \vdash$                                  | +        | +  | $\vdash \vdash$     | +        | 4-4 | Н               |   |          | 111        | $\dashv$ | +        | +  | +        | -                                                |          | -+       | 4        |
|                                                  | 12         |             |               | $\dashv$ | +      | +      | +        | -+       | +          | -     | —                                                | 62       | $\vdash \vdash$                                  | +        | +  | $\vdash \vdash$     | +        | ╁┥  | Н               |   |          | 112        | +        | +        | +  | $\vdash$ | -                                                |          | -        | 4        |
| $\vdash$                                         |            | <b>V</b>    | <b>r</b>      | -+       | +      | +      |          | +        | +          | -     | <del> </del>                                     | 63       | $\vdash$                                         | +        | +  | $\vdash \vdash$     | +        | ╁╌┤ | $\vdash$        |   | ·        | 113        | -        | +        | +  | $\vdash$ |                                                  |          | $\dashv$ | 4        |
| <b> </b>                                         | 14         | <b>V</b>    | V             | +        | +      | +      | -+       | +        | +          |       |                                                  | 64       | ⊢                                                | +        | +  | $\vdash$            | +        | +   | $\vdash \vdash$ |   |          | 114        |          |          | +- | ┼        |                                                  | $\dashv$ | -+       | _        |
| <b> </b>                                         | 15<br>16   | <b>Y</b>    | ٢             | $\dashv$ | +      | +      | +        | +        | +          | -     |                                                  | 65       | ╁╌┤                                              |          | +- |                     |          | +   | $\vdash \vdash$ |   |          | 115        |          | +        | +  | ┼        | -                                                |          | -+       |          |
| -                                                |            | ۷ ۲         | 2             | -+       | +      |        | -+-      | +        | - -        | -     | <b>}</b>                                         | 66       | ╁                                                | +        | +- | ┥                   | +        | ╁┤  | $\vdash$        |   |          | 116        | $\dashv$ | +        | +  | $\vdash$ | $\vdash$                                         | $\dashv$ | $\dashv$ | 4        |
| $\vdash$                                         | 17         | 7           | ٢             | -+       | +      | +      | +        | +        | +          | -     | }                                                | 67       | ⊢                                                | +        | +  | ╌┤                  |          | ╁┤  | $\dashv$        |   | _        | 117        | +        | +        | +- | ╀        | H                                                | $\dashv$ | +        | 4        |
| <b></b>                                          | 18         |             | ٢             |          | -      | -      | -        | -+       |            | -     |                                                  | 68       | $\vdash \vdash$                                  | +        | +- | ⊢                   | -        |     | $\vdash \vdash$ |   |          | 118        |          | +        | +- | ┼        | -                                                |          | -        | _        |
| $\vdash$                                         | 19         | <b>&gt;</b> | 7             |          | +      | -      |          |          |            | -{::: | <u> </u>                                         | 69       | Н                                                | +        | +  | $\vdash$            |          | 4   | $\vdash \dashv$ |   |          | 119        |          |          | +  | ╂        | -                                                |          |          | _        |
| $\vdash$                                         | 20         | 7           | 4             | -+       | -+-    | +      | -        | -+       |            | -     | -                                                | 70       | Н                                                |          | +- | ┝┥                  |          | +   | Н               |   | _        | 120        | -        | +        | +- | ┼        | -                                                |          | +        | _        |
| $\vdash$                                         | 21         | ٧٧          | ٢             | $\dashv$ | +      | +      |          |          | - -        | -     | <del> </del>                                     | 71       | $\vdash$                                         | +        | ╀  | $\vdash \downarrow$ | +        | +   | $\vdash$        |   | <u> </u> | 121        | $\dashv$ | +        | +  | ╀        | $\vdash$                                         | $\dashv$ | $\dashv$ | $\dashv$ |
| <u> </u>                                         | 23         | 2           | <b>Y</b>      | $\dashv$ | +      | +      | +        | +        | +          | -     | }                                                | 72<br>73 |                                                  |          | +- | ┥                   | +        | +   | Н               |   |          | 122<br>123 |          | +        | ╁  | +-       | -                                                |          | -        | 4        |
| <b></b>                                          | 24         | 7           | -             | -+       | +      | -+     | -+       | -+       | -+-        | -     | <b></b>                                          | 74       | H                                                | +        | +  | ⊢┼                  |          | +   | $\vdash \vdash$ |   |          | 123        | -        | +        | +- | ╁        | $\vdash$                                         | -        | -+       | 4        |
| <b>-</b>                                         | 25         | 7           | レレ            | $\dashv$ | +      | +      | +        | $\dashv$ | +          | -     |                                                  | 75       | $\vdash$                                         | ╁        | +- | ┥                   | +-       | +   | H               |   |          | 125        | -        | +        | +  | +-       | $\vdash$                                         |          | $\dashv$ | -        |
| $\vdash$                                         | 26         | V           | $\overline{}$ | -+       | +      | ╅      | +        | +        | +          | -     | }                                                | 76       | 1 1                                              |          | +  | H                   |          | ╁╌╢ | Н               |   |          | 126        |          | -        | ┿  | ╁        | Н                                                | -        | +        |          |
| $\vdash$                                         | 27         | >           | ン             | $\dashv$ | +      | +      | +        | +        | +          | -     | <del> </del>                                     | 77       | ╂╌╂                                              |          | +- |                     |          | +   | Н               |   |          | 127        | -        | +        | ┿  | ╀        | $\vdash$                                         |          | +        |          |
| $\vdash$                                         | 28         | Ż           | 7             | $\dashv$ | +      | +      | +        | $\dashv$ | +          | -1    | <b></b>                                          | 78       | ┨                                                |          | +- |                     | +        | ╁┤  | Н               |   |          | 128        |          | +        | +- | +-       | $\vdash$                                         |          | -        |          |
|                                                  | 29         | \<br>\      | -             | $\dashv$ | +      | ╅      | +        | $\dashv$ | +          | -     | <del> </del>                                     | 79       | ╂┷┼                                              |          | +  | ╂╼┼                 | ╮┤╴      | ┿   | Н               |   |          | 129        |          |          | +  | ┼        | -                                                |          | -+       |          |
| <b></b>                                          | 30         | ۲           | 7             | -        | +      | +      | +        | +        | +          | -1::: |                                                  | 80       | ┨╌┤                                              |          | ┿  | ╌                   | +        | ┿┥  | Н               |   |          | 130        | -        | +        | ┿  | ┿        | $\vdash$                                         | -        | $\dashv$ | $\dashv$ |
| <del></del>                                      | 31         | 7           | ī             | +        | +      | +      | +        | -+       | -          | -     | <del> </del>                                     | 81       | 1                                                | +        | +  | $\vdash$            | +        | +   | Н               |   |          | 131        | $\vdash$ | +        | ┿  | ╁        | $\vdash$                                         | $\dashv$ | +        | $\dashv$ |
| $\vdash$                                         | 32         | _           | 7             | $\dashv$ | +      | +      | +        | +        | +          | -     | <del> </del>                                     | 82       | $\vdash$                                         | +        | ┿  | $\vdash \vdash$     | +        | ╁┤  | $\vdash \dashv$ |   |          | 132        | $\dashv$ | ╁        | +  | ╁╌       | $\vdash$                                         | $\dashv$ | $\dashv$ | $\dashv$ |
| $\vdash$                                         | 33         | Y.          | -             | -+       | +      | -+     | +        | -+       | +          | -     | <del> </del>                                     | 83       | $\vdash$                                         | +        | +- | ╁┼                  | +        | ╅┥  | ├─┤             |   | <u> </u> | 133        | +        | +        | +  | ╁        | $\vdash$                                         | $\dashv$ | -+       | -        |
|                                                  | 34         | Н           | $\dashv$      | $\dashv$ | +      | +      | +        | +        | -+-        | -     | <b> </b>                                         | 84       | 1-1                                              |          | +- | ┝╍┼                 |          | ┿┥  | $\vdash \vdash$ |   |          | 134        |          |          | +- | ┼        | <del>  </del>                                    | $\dashv$ | -+       |          |
| $\vdash$                                         | 35         | $\vdash$    | -             | -+       | +      | +      | +        | +        | +          | ┨Ш    |                                                  | 85       | $\vdash$                                         | +        | +  | ┢╅                  | +        | +   | $\vdash \vdash$ |   |          | 135        | +        | ┰        | +- | +        | $\vdash$                                         |          | $\dashv$ |          |
| $\vdash$                                         | 36         | H           | $\dashv$      | +        | +      | +      | ┿        | $\dashv$ | ┰          | ۱     | <b></b>                                          | 86       | ┥                                                | +        | +- | ┝╌┤                 | +        | + + | $\vdash \vdash$ |   |          | 136        | -+       | +        | +  | $\vdash$ | $\vdash$                                         | -        | $\dashv$ | $\dashv$ |
|                                                  | 37         | Н           | $\vdash$      | +        | +      | +      | +        | +        | +          | ۱     | -                                                | 87       | ╁╼┼                                              | -+       | +- | $\vdash$            | +        | +   | $\vdash$        |   |          | 137        | $\dashv$ | +        | +  | +        | $\vdash$                                         | -        | $\dashv$ | $\dashv$ |
|                                                  | 38         | $\vdash$    | -             | +        | +      | ┯┼     | ┰        | -+       | ╅          |       | <b></b>                                          | 88       | ╁╼╅                                              |          | +- | ┢╌┼                 | $\dashv$ | +   | -               |   |          | 138        | -        |          | +  | +-       | ┝                                                | -        | -+       |          |
| <b>  </b>                                        | 39         | $\vdash$    | -             | $\dashv$ | +      | 十      | +        | -+       | -          | -     | <del>                                     </del> | 89       | $\vdash$                                         | +        | +  | ┼╌┼                 |          | ╅┥  | $\vdash$        |   |          | 139        | +        | +        | +- | +-       | $\vdash$                                         | -        | ┥        | 4        |
|                                                  | 40         | $\vdash$    | $\dashv$      | +        | +      | 十      | +        | +        | +          | ┨║    | <del> </del>                                     | 90       | ╁┼                                               | +        | +- | $\vdash$            | +        | +-1 | $\vdash \vdash$ |   |          | 140        | -        | ╁        | +  | +-       | Н                                                | $\dashv$ | $\dashv$ | $\dashv$ |
| $\vdash$                                         | 41         |             | $\dashv$      | $\dashv$ | +      | ╅      | +        | +        | +          | ۱.    | 1                                                | 91       | ╁                                                | +        | +- | ┢╌╅                 | +        | 1-1 | $\vdash$        |   |          | 141        | +        | +-       | +  | +-       | Н                                                | $\dashv$ | $\dashv$ | $\dashv$ |
| $\vdash \vdash$                                  | 42         | -           | -             | -        | +      | +      | +        | $\dashv$ | +          | ┨║    | -                                                | 92       | ╁╌┼                                              |          | +  | ╁┼                  | +        | +   | $\vdash \dashv$ |   |          | 142        | -+       | +        | +- | +-       | $\vdash$                                         | $\dashv$ | $\dashv$ | -        |
|                                                  | 43         | -           |               | -        | +      | -      | $\dashv$ | $\dashv$ | ┿          | ۱     | <del> </del>                                     | 93       |                                                  |          | +  | $\vdash$            | +        | ╁┼  | Н               |   |          | 143        | -        | 十        | +- | +        | <del>                                     </del> | -        | +        | -        |
|                                                  | 44         |             | $\vdash$      | $\dashv$ | +      | $\top$ | +        | $\dashv$ | 十          | ۱.    | 1-                                               | 94       | $\vdash$                                         | +        | †  | H                   | $\dashv$ | 1-1 | H               |   |          | 144        | -+       |          | +  | +        | $\vdash$                                         |          | +        | -        |
|                                                  | 45         |             | -             | +        | $\top$ | +      | +        | +        | 十          | ۱     | <b> </b>                                         | 95       | $\vdash$                                         |          | +  | Н                   | 十        | 1   | H               |   |          | 145        | +        | +        | ┿  | +-       | H                                                | $\dashv$ | $\dashv$ | ᅱ        |
|                                                  | 46         |             |               | $\dashv$ | +      | 十      | $\top$   | +        | $\top$     | חווו  | _                                                | 96       | ╅                                                | +        | +  | $\vdash$            | 十        | 1   | Н               |   |          | 146        | +        | 十        | +  | +        | Н                                                | - 1      | -        | $\dashv$ |
|                                                  | 47         |             |               | $\dashv$ | $\top$ | -†     | $\top$   | +        | +          | ۱!!   | 1                                                | 97       | <b>t</b> .t                                      | $\dashv$ | +- | $\vdash$            | 十        | 1-1 | М               |   |          | 147        |          | +        | +  | +-       | H                                                | -        | $\dashv$ | -+       |
|                                                  | 48         | Н           | $\dashv$      | 十        | 十      | 十      | +        | +        | $\top$     | ٦     | <b> </b>                                         | 98       | 1                                                | _        | 十  | <b> </b>            | 十        | +   | Н               |   |          | 148        |          |          | +- | +        | 1-                                               |          | +        | $\dashv$ |
|                                                  | 49         |             |               | $\dashv$ | +      | 7      | $\top$   | 7        | $\top$     | 7     | 1                                                | 99       | Н                                                | 十        | 1  | $\vdash$            | 十        | 11  | Н               |   |          | 149        | -+       | +        | ╅  | 1        | Н                                                | -        | +        | -        |
|                                                  | 50         |             |               | _        | 1      | _      | 十        | 7        | $\dashv$   | ١!!!  |                                                  | 100      | 1-1                                              | +        | 1  | Гt                  | $\top$   | +   | М               |   |          | 150        | -+       | $\dashv$ | +- | $\vdash$ | 1                                                | -        | $\dashv$ | $\dashv$ |